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Editor

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Cost of pain management in the U.S. is approximately \$600 Billion annually - *J Pain. 2012 May 16.*

Hemodynamic compromise is decreased with manual removal of the placenta at 10 minutes after delivery compared to 15 minutes after delivery. - *Am J Perinatol. 2012 May 7.*

1 mmol/L reduction in LDL cholesterol appears to reduce the risk of major vascular events by about 11 per 1000 people over 5 years. - *Lancet. 2012 May 16.*

Occipital nerve stimulation therapy appears to be safe and effective in the treatment of chronic migraine and medication overuse

headache - Pain Physician. 2012 May;15(3):245-53.

Singletons pregnancies after in-vitro fertilization / intracytoplasmic sperm injection are associated with higher risks of obstetric and perinatal complications when compared with spontaneous conception. - Hum Reprod Update. 2012 May 19.

Childbirth in the lateral position resulted in less perineal trauma when compared with childbirth in the lithotomy position, even after correcting for parity and birth attendant. - Birth (2012).

It is estimated that a 3.9 to 4.3% increase across crime categories would result from a

20% increase in neighborhood alcohol establishment density. - Alcohol Clin Exp Res. 2012 May 15.

The likelihood of completing <16 years of education was significantly increased by: a) alcohol use before age 18; b) a lifetime alcohol dependence diagnosis; and c) daily nicotine use for 30 or more days. No differences in education were observed for cannabis. - Alcohol Clin Exp Res. 2012 May 15

We concluded that photodynamic therapy in this cohort is effective in the treatment of ACNE VULGARIS when combined with intralesional 5-aminolevulenic acid. It gives superior results compared with intense

pulsed light alone with minimal and tolerable side effects and less recurrence rates. - *Dermatol Ther. 2012 Jan;25(1):86-91.*

Less than half of Medicaid-insured colorectal cancer survivors received a colonoscopy in 3 to 18 months after colorectal resection. Improvements in screening in this high-risk population should be the target of future interventions to reduce the probability of recurrence. - *Am J Clin Oncol. 2012 Jun;35(3):205-11.*

For women in their 50s to 80s without clinical depression, increased total physical activity is correlated with improved current and future health. - *J Epidemiol Community Health.*

Health. 2012 Apr 27.

Chest CT using 3D automatic exposure control was shown to reduce patient radiation exposure from 800 DLP to 200 DLP. - Eur J Radiol. 2012 Jun;81(6):1330-4.

This study found atherosclerosis to be associated with osteoarthritis of the knee and hand joints in women. - Ann Rheum Dis. 2012 May 14.

Increasing longevity coupled with a rising trend of dementia is likely to mean a major shift towards higher nursing home care use in the future. - J Epidemiol Community Health. 2012 Apr 27.

A single ultrasound guided dexamethasone injection is a safe and effective short term treatment for plantar fasciitis, but significant pain relief was found to NOT continue beyond four weeks. - [BMJ 2012;344:e3260](#)

In Europe and the U.S., 20-40% of women gain excessive weight during pregnancy, which is associated with adverse outcomes. Dietary interventions during pregnancy appear helpful, reducing the risk of pre-eclampsia and shoulder dystocia. - [BMJ 2012;344:e2088](#)

The INHOMESS mnemonic (impairments/immobility, nutrition, home environment, other people, medications, examination, safety, spiritual health,

services) addresses the components of a comprehensive house call. - *Am Fam Physician. 2011 Apr 15;83(8):925-931.*

The diagnosis of pelvic inflammatory disease is made clinically; no single test or study is sensitive or specific enough for a definitive diagnosis. Patients should be treated empirically. Most can be treated successfully with ceftriaxone or cefoxitin IM plus oral doxycycline. - *Am Fam Physician. 2012 Apr 15;85(8):791-796.*

Children with hypertension should be screened for cardiovascular risk factors such as diabetes and hyperlipidemia. Also evaluate for target organ damage with a retinal examination and echocardiography.

Treatment is usually lifestyle changes, including weight management, a healthy, low-sodium diet, regular physical activity, and avoidance of tobacco and alcohol. Children with symptomatic hypertension, secondary hypertension, target organ damage, diabetes, or persistent hypertension despite nonpharmacologic measures should be treated with antihypertensive medications. - *Am Fam Physician. 2012 Apr 1;85(7):693-700*

Asking high-risk patients about suicidal intent leads to better outcomes and does not increase the risk of suicide. - *Am Fam Physician. 2012 Mar 15;85(6):602-5*

Use of pharmacologic support during

smoking cessation (e.g. nicotine replacement, bupropion, or varenicline) can double the rate of successful abstinence. -

Am Fam Physician. 2012 Mar 15;85(6):591-8

Divalproex (Depakote), valproic acid, carbamazepine, risperidone, quetiapine (Seroquel), and (olanzapine + SSRI) are used in the treatment of bipolar disorder. -

Am Fam Physician. 2012 Mar 1;85(5):483-93

For elderly individuals without dementia, increased total daily physical activity resulted in a 50% decreased risk in developing Alzheimer's Disease. -

Neurology. 2012 Apr 24;78(17):1323-9.

A city-wide smoking ban in Pueblo, Colorado resulted in decreased maternal smoking and preterm births. - *J Womens Health (Larchmt)*. 2012 Jun;21(6):621-7.

Controlling hypertension can reduce the risk of Alzheimer's Disease by decreasing the activation of a receptor for advanced glycation end products - *Hypertension*. 2012 May 21.

The American Academy of Family Physicians is recommending against performing prostate-specific antigen (PSA)-based screening for prostate cancer in asymptomatic men, a position that is in line with a final recommendation from the U.S. Preventive Services Task Force (USPSTF)

that was published May 22 in the Annals of Internal Medicine. - *AAFP News Now.*

Posted 5/22/2012, 4:00 p.m.

Among children and adolescents in a low-income, urban population, supplementing usual care with text messaging was associated with an increased rate of influenza vaccination. However, the overall vaccination rate remained low. - *JAMA.*
2012;307(16):1702-1708.

Extremely dense breasts and first degree relatives with breast cancer were each associated with at least a 2 fold increase in risk for breast cancer in women aged 40 to 49 years. - *Ann Intern Med. 2012 May 1;156(9):635-48.*

Young adults are using more sunscreen, but continue to get excess sunburns. In 2010, over half of all U.S. adults aged 18-29 reported one or more sunburns in the past year. Exposure to UV rays from tanning beds and the sun is the most important preventable risk factor for skin cancer, and sunburns are evidence of too much exposure. Ongoing public health efforts in this area are needed. - [MMWR 10-May-2012](#)

In 2010, 32 percent of non-Hispanic white women aged 18-21 years reported indoor tanning, with an average of 28 sessions in the past year. - [MMWR 10-May-2012](#)

The teen birth rate of 34.3 births per 1,000 females reflect a 44 percent decline from

1990. The increased use of contraceptives may be a contributing factor to the decline of teen births. Teen pregnancy can best be prevented by delaying the initiation of sexual activity. - MMWR 03-May-2012

Elective induction of labour at term gestation can reduce perinatal mortality in developed countries without increasing the risk of operative delivery. - BMJ 2012;344:e2838

Women who use transdermal patches or vaginal rings for contraception have a 7.9 and 6.5 times increased risk of confirmed venous thrombosis compared with non-users of hormonal contraception of the same age - BMJ 2012;344:e2990

Circuit training after a stroke is as effective as standard physiotherapy after a stroke, and may be better in terms of gait speed at follow-up. In this study, the circuit training consisted of 90 minute sessions twice a week for three months. It included eight different workstations in a gym, designed to improve performance in tasks relating to walking competency. - BMJ

2012;344:e2672

Risk of cardiovascular disease does not appear to be increased with the use of varenicline (Chantix) for smoking cessation. - BMJ 2012;344:e2856

In men, an abdominal aortic diameter of 25 mm or greater is associated with greatly

increased morbidity and mortality compared to those with an abdominal aortic diameter of 24 mm or less. The risk of hospital admission, after accounting for smoking status, was increased for cerebrovascular disease, atherosclerosis, peripheral arterial disease, and respiratory disease. The authors conclude that men can benefit from undergoing routine abdominal aortic aneurysm screening. - [BMJ 2012;344:e2958](#)

Bullying appears to be correlated with non-suicidal self injury for children 12 years old. Bullied children who self-harm were more likely to have a family history of suicide or suicide attempts, and have concurrent mental health problems. - [BMJ 2012;344:e2683](#)

Compression ultrasonography is as effective at ruling out a deep vein thrombosis (DVT) in pregnant or postpartum women as compared to non-pregnant women. In these patients, when there is no evidence of a pulmonary embolism, a single compression ultrasound when normal suggests it is safe to follow these patients without giving anticoagulants. - *BMJ 2012;344:e2635*

Antihypertensive therapy usually should not be initiated with diuretics, as this tends to result in the need for a greater number of medications while not achieving better blood pressure control. - *J Hypertens. 2012 Jun;30(6):1225-32.*

Aspirin appears to reduce the risk of cancer

with distant metastasis by about 30%. There is some evidence that aspirin may decrease the risk of metastases in patients with adenocarcinoma. Aspirin may be particularly helpful in smokers. A low-dose, slow-release formulation of aspirin designed to inhibit platelets but to have little systemic bioavailability was found to be as effective as higher doses. - *Lancet. 2012 Apr 28;379(9826):1591-601.*

Matthew effect (sociology): the phenomenon in sociology where "the rich get richer and the poor get poorer." Based upon a passage (Matthew 25:29) in the New Testament: "For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken

away even that which he hath." - [Wikipedia: Matthew Effect](#)

Analyses suggest that children's procedural anxiety mediates the relation between parents' anticipatory anxiety and children's procedural pain. Thus, targeting parents' preprocedural anxiety might be beneficial to the parents as well as the children undergoing a distressing medical procedure.

- [J Pediatr Psychol. 2012 May 22.](#)

In obese peoples, modest weight loss reduces arterial stiffness which appears to be related to improved markers of inflammation. - [Diab Vasc Dis Res. 2012 Apr 25.](#)

In patients with advanced heart failure, higher HbA1c levels were associated with improved outcomes. For every unit HbA1c increase, there was a 15% decreased hazard ratio of death or urgent heart transplantation and all-cause mortality - *Amer J Cardiol 29. March 2012.*

Breastfeeding for at least 4 months was found to be associated with a protective effect on a child's social, attention, and aggression problems in early adolescence. - *Breastfeed Med. 2012 May 21.*

Nonvascular deaths, including cancer deaths, are reduced with low-dose aspirin. There were 162 of 7998 (2.02%) and 210 of 8068 (2.60%) cancer deaths among low-

dose aspirin users versus non-aspirin users, respectively, reported over an average follow-up of 2.8 years, a mortality reduction of about 20%. - *Am J Med. 2012 Jun;125(6):560-7.*

Children who attended schools where soda pop and non-low-fat salty snacks could be purchased were 2 to 4 times more likely to be obese than children at schools where such items were not sold. - *J Sch Health. 2012 Jun;82(6):285-93.*

Poor adult modelling of regular hand washing and unattractive facilities were seen as important barriers to regular hand washing among children in primary school. - *Health Educ Res. 2012 May 22.*

Tigecycline monotherapy is non-inferior to a combination regimen of ceftriaxone plus metronidazole in the treatment of complicated intra-abdominal infections. -

Clin Microbiol Infect. 2010
Aug;16(8):1274-81.

Human papillomavirus infection increases the risk of esophageal squamous cell carcinoma in smokers, but does not increase the risk in non-smoking and non-alcohol consuming people. - *Dis Esophagus. 2012*
Mar 9.

Patients on statins were found to have a 20% decreased risk of developing C difficile infection in the hospital. - *Gut. 2012 Mar 22.*

Unenhanced CT is the preferred examination for evaluation of urolithiasis because of its availability, ease of performance, and high sensitivity. - AJR Am J Roentgenol. 2012 Jun;198(6):W540-7.

The addition of simvastatin to enalapril in hypertensive patients was found to improve parameters of diastolic function. This is likely clinically relevant because diastolic dysfunction is frequent and increases mortality. - Atherosclerosis. 2012 Jun;222(2):444-8. Epub 2012 Apr 3.

Statin use is strongly associated with improved discharge disposition after ischemic stroke. - Neurology. 2012 May 22;78(21):1678-83.

In school-aged children with an acute asthma exacerbation, adding a 3-wk course of clarithromycin to standard treatment helped decrease duration of the exacerbation and increase the number of subsequent symptom-free days. - *Pediatr Allergy Immunol. 2012 Jun;23(4):385-90.*

Beclomethasone/formoterol (Fostair) appears to be less expensive but as clinically effective as fluticasone propionate/salmeterol (Advair) in adults with moderate to severe persistent asthma. - *Clin Drug Investig. 2012 Apr 1;32(4):253-65.*

Airway responsiveness, lung volumes and asthma severity/control markedly improved

with weight loss following bariatric surgery in severely obese patients (BMI ~ 50 kg/m²)
- *Respir Med. 2012 May;106(5):651-60.*

In people with urinary incontinence, associated anal incontinence is common. These authors recommend routinely screening for anal incontinence in patients with urinary symptoms. - *Int Urogynecol J. 2012 May 15.*

Awareness of the breastfeeding recommendation to breastfeed exclusively for 6 months is an independent positive predictor of breastfeeding initiation and duration. - *Breastfeed Med. 2012 May 8.*

Overweight and obese adolescents had 36%

and 37% more sick days, respectively, than adolescents of normal weight. - *J Adolesc Health 24 May 2012.*

Serum uric acid level is a significant predictor of cardiac events in patients with diabetes when using a Cox regression model, however, it does not appear to add additional information beyond that provided by N-terminal pro-B-type natriuretic peptide levels. - *Diabet Med. 2012 Jun;29(6):721-725.*

Antidepressants and benzodiazepines are in general safe regarding survival in heart failure patients, with the possible exception of fluoxetine. - *Int J Cardiol. 2012 Apr 14.*

This study found that the most commonly used anti-diabetic oral medication was metformin, followed by repaglinide (Prandin), DPP4 inhibitors (e.g. sitagliptin / Januvia), and sulphonylureas (most commonly glimepiride). Measuring renal function in diabetics is helpful in modifying medications, since at low GFRs it may be beneficial to change from metformin to another agent. - *Nefrologia. 2012 May 14;32(3):367-373.*

Metformin appears to be associated with a lower risk of liver cancer in patients with type 2 diabetes. - *J Clin Endocrinol Metab. 2012 Apr 20.*

Quetiapine and quetiapine XR are valuable

additions to the first-line treatments for bipolar depression. A common side-effect appears to be clinically relevant increases in blood glucose or lipid parameters. - *CNS Drugs. 2012 May 1;26(5):435-60.*

Subcutaneous sumatriptan is effective as an abortive treatment for acute migraine attacks, quickly relieving pain, nausea, photophobia, phonophobia, and functional disability, but is associated with increased adverse events. - *Cochrane Database Syst Rev. 2012 Feb 15;2:CD009665.*

Oral diclofenac potassium 50 mg is an effective treatment for acute migraine, providing relief from pain and associated symptoms, although only a minority of

patients experience pain-free responses. Adverse events are mostly mild and transient and occur at the same rate as with placebo. - *Cochrane Database Syst Rev.* 2012 Feb 15;2:CD008783.

Divalproex sodium, sodium valproate, topiramate, metoprolol, propranolol, and timolol are effective for migraine prevention and should be offered to patients with migraine to reduce migraine attack frequency and severity. - *Neurology.* 2012 Apr 24;78(17):1337-45.

Prochlorperazine (Compazine) is superior or equivalent to all other classes of medications in rescue therapy for acute migraine pain relief. - *Headache.* 2012 Mar;52(3):467-82.

Alternative acute and preventive agents should always be explored since opioids do not work well clinically in migraine. - *Headache. 2012 May;52 Suppl 1:30-4.*

Tramadol hydrochloride 37.5 mg with acetaminophen 325 mg has been shown to be most effective in patients with mild to moderate pain and has a lower risk of serious adverse events. The combination appears more effective than tramadol alone. - *Drugs Today (Barc). 2011 Oct;47(10):763-72.*

In the long-term (1h and 24h after administration), dexamethasone 8 mg IV reduces the severity of acute migrant headache more than morphine 0.1 mg/kg IV.

- Pak J Biol Sci. 2011 Jun 15;14(12):682-7.

Cathinone is a naturally occurring beta-ketone amphetamine analogue found in the leaves of the *Catha edulis* plant. Synthetic cathinones ("Bath Salts") are derivatives of this compound that have emerged as drugs of abuse. The effect is similar to amphetamines and MDMA. - J Med Toxicol. 2012 Mar;8(1):33-42.

Vegetable intake is inversely associated with allergic asthma and moderate/severe airway hyper-responsiveness. - Pediatr Pulmonol. 2012 May 24.

Side effects were fewer with exercise treadmill testing combined with

regadenoson, compared to regadenoson given with the patient supine. - *J Nucl Cardiol. 2012 May 8.*

In painful diabetic neuropathy, duloxetine and amitriptyline have similar efficacy. Good, moderate, and mild pain relief was achieved in about 55%, 20%, and 10% of patients, respectively. Dry mouth was significantly more common in the amitriptyline group. Patients preferred duloxetine over amitriptyline, however, this difference was not statistically significant. - *Diabetes Care. 2011 April; 34(4): 818-822.*

Elevated serum glucose levels on admission to the hospital is associated with an increased risk of death in patients with

community acquired pneumonia without pre-existing diabetes - BMJ 2012;344:e3397

Women with atrial fibrillation have a moderately increased risk of stroke compared with men, and thus, female sex should be considered when making decisions about anticoagulation treatment. However, women younger than 65 years and without other risk factors have a low risk for stroke, and do not always benefit from anticoagulant treatment. - BMJ 2012;344:e3522

Pioglitazone in type 2 diabetics is associated with a 1.2 increased risk of bladder cancer. The absolute risk of bladder cancer in this study of type 2 diabetics was 0.9 per 1000

patient years. With at least 2 years of pioglitazone use, the risk increased to 1.2 per 1000 patient years. The number needed to harm was approximately 750 for a cumulative pioglitazone use of 28,000 mg and 1100 for a cumulative pioglitazone use duration of more than 24 months.

Rosiglitazone does not appear to be associated with an increased risk of bladder cancer. - BMJ 2012;344:e3645

Daily consumption of dark chocolate appears to be of benefit to patients with metabolic syndrome. - BMJ 2012;344:e3657

In preschool children with an acute wheezing episode presenting to the

emergency department, using 4ml of hypertonic saline 5% mixed with 0.5 ml of albuterol for nebulizer treatments, as compared with using normal saline mixed with the albuterol solution, significantly shortened length of stay and lowered the admission rate. - *Pediatrics. 2012. Jun;129(6):e1397-403.*

In 12 to 17 year olds with 2 to 8 migraines per month for \geq 6 months, treatment of an acute attack with an oral sumatriptan and naprox combination pill was effective for pain relief. The 85/500 dose was no more effective than lower doses (as low as 10/60). This suggests that 1/2 of a tablet of the 85/500 strength formula (TrexiMet) is as effective as a whole tablet in this population.

- *Pediatrics. 2012 Jun;129(6):e1411-20.*

In people with chronic kidney disease, the benefits of antiplatelet therapy are uncertain and potentially outweighed by bleeding hazards. Antiplatelet therapy appears to have uncertain effects on cardiovascular hard events and mortality, while increasing bleeding hazards. - *Ann Intern Med. 2012 Mar 20;156(6):445-59.*

Manual therapy in chronic low back pain appears to be beneficial in terms of improving range of motion. - *Man Ther. 2012 May 31.*

After fortification of grain products with folic acid in the U.S. in 1996 - 1998, the

incidence of Wilms tumor and primitive neuroectodermal tumors were significantly reduced. - Pediatrics. 2012 Jun;129(6):1125-33.

Lithium treatment can reduce the attack frequency in episodic cluster headache. In this study where lithium blood levels were periodically monitored, adverse drug reactions from the lithium were mild and affected about 15% of patients. - Headache. 2012 Jun 1.

Doubling the clopidogrel dose was not effective to reduce high on-treatment platelet reactivity in almost half of the study patients with coronary artery disease, pointing to the need of a more powerful

platelet inhibitor. - *Cardiovasc Revasc Med.* 2012 May;13(3):159-66.

Danshen dripping pill (DSP) is a popular Chinese medicinal product and often compared with isosorbide dinitrate (ISDN) in treating coronary heart disease angina pectoris. This meta-analysis found that DSP was more effective than ISDN in treating angina pectoris. - *Int J Cardiol.* 2012 Jun 14;157(3):330-40.

Preoperative statin administration is associated with early reductions in mortality among patients undergoing isolated valvular heart surgery, leading to improved late survival. - *Ann Thorac Surg.* 2012 Jun;93(6):1881-7.

BMI is an independent predictor of CV mortality but waist circumference is not. - *Nutr Metab Cardiovasc Dis. 2012 May 25.*

A 15-minute massage applied with almond oil during pregnancy reduced the development of striae gravidarum. - *J Clin Nurs. 2012 Jun;21(11-12):1570-6.*

This study demonstrated a slight advantage of breastfed infants on cognitive development compared with formula-fed infants. - *Pediatrics. 2012 Jun;129(6):1134-40.*

Limiting access to pharmaceutical representatives can have the unintended effect of reducing appropriate changes in

prescribing habits. This means patients of physicians with limited access were put through greater potential risks compared to patients being treated by more open-access physicians. - *J Clin Hypertens (Greenwich)*. 21 MAY 2012.

Exercise stress test-induced ST-segment depression in asymptomatic subjects with normal coronary arteries cannot be considered as a simple false-positive result, because it can be related to coronary microvascular dysfunction. - *Am J Cardiol.* 2012 Jun 15;109(12):1705-10.

Patients with nonvisualization of the appendix on ultrasonography, but otherwise normal scans, are at significantly lower risk

for appendicitis, either perforated or nonperforated. Active clinical observation should be considered in these patients, rather than direct referral for CT. - *J Clin Ultrasound. 2012 May 25.*

There is growing evidence that oxidative stress may play a role in psychiatric disorders, including depression, and that antioxidants such as N-acetyl-cysteine may be useful in the prevention and treatment of depression. - *CNS Drugs. 2012 Jun 1;26(6):477-90.*

This study found that the prevalence of smoking in Chinese urban areas was 30%. Tobacco advertising was associated with increased smoking, whereas workplace and

household smoking bans were associated with decreased smoking rates. - *Drug Alcohol Depend. 2012 Jul 1;124(1-2):121-7.*

The CDC is proposing HCV screening for all people born from 1945 through 1965 in addition to testing people at high risk or recent possible exposure. This recommendation to screen all Baby Boomers is contrary to recommendations from U.S. Preventive Services Task Force and the American Academy of Family Physicians. - *AAFP News Now, posted 6/6/2012.*

Monotherapy with metformin was associated with durable glycemic control in

approximately half of children and adolescents with type 2 diabetes. The addition of rosiglitazone, but not an intensive lifestyle intervention, was superior to metformin alone. - *N Engl J Med. 2012 Apr 29.*

Maternal vitamin D deficiency and insufficiency is prevalent among gravid women and is associated with markers of altered glucose homeostasis. - *J Obstet Gynecol Neonatal Nurs. 2012;41(3):328-338.*

While every attempt has been made to ensure accuracy, mistakes can and do occur. Use these medical pearls at your own risk.

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